CLAIMS

1. An application program interface embodied on one or more computer readable media, comprising:

a first namespace related to data shared by a plurality of data providers;

a second namespace related to data used in an object-oriented database;

a third namespace related to data used by an SQL client; and

a fourth namespace related to native data types within an SQL server.

2. An application program interface as recited in claim 1, wherein the SQL server is a Microsoft SQL Server.

3. An application program interface as recited in claim 1, wherein the first namespace includes a data adapter class to exchange data between a data source and a data set.

4. An application program interface as recited in claim 1, wherein the first namespace includes a data column mapping class to map column names from a data source to column names in a data table.

5. An application program interface as recited in claim 1, wherein the first namespace includes a data table mapping class to map data returned from a query of a data source and a data table.

6. An application program interface as recited in claim 1, wherein the first namespace includes a row update class to indicate when an update to a row is started.

7. An application program interface as recited in claim 1, wherein the first namespace includes a row update class to indicate when an update to a row is completed.

8. An application program interface as recited in claim 1, wherein the second namespace includes a command builder class to automatically generate SQL statements for data table updates.

9. An application program interface as recited in claim 1, wherein the second namespace includes a connection class to enable a connection to a data source.

10. An application program interface as recited in claim 1, wherein the third namespace includes a command builder class to automatically generate SQL statements for data table updates.

11. An application program interface as recited in claim 1, wherein the third namespace includes a connection class to represent a unique session to an SQL server data source.

12. An application program interface as recited in claim 1, wherein the third namespace includes a data adapter class to exchange data between a data set and an SQL server for retrieving and saving data.

13. A network software architecture comprising the application program interface as recited in claim 1.

14. An application program interface embodied on one or more computer readable media, comprising:

a first group of services related to sharing data among a plurality of data providers;

a second group of services related to using data in an object-oriented database;

a third group of services related to data used by a database client; and

a fourth group of services related to data types used by a database server.

15. An application program interface as recited in claim 14, further comprising a constraint class to maintain the integrity of data in a data table.

16. An application program interface as recited in claim 14, further comprising a data column class to create a data table.

17. An application program interface as recited in claim 14, further comprising a data column collection class to identify the type of data each data column in a data table can contain.

18. An application program interface as recited in claim 14, further comprising a data relation class to relate two data table objects to each other.

19. An application program interface as recited in claim 14, further comprising a data row collection class to identify data stored in a data table.

20. An application program interface as recited in claim 14, further comprising a property collection class to add custom properties to a data table.

21. A network software architecture comprising the application program interface as recited in claim 14.

22. A method comprising:

creating a common namespace related to data shared by a plurality of data providers;

creating an object-oriented namespace related to data used in object-oriented databases;

creating an SQL client namespace related to data used by SQL clients; and

creating an SQL types namespace related to native data types in an SQL server.

23. A method as recited in claim 22, wherein the common namespace includes:

a data adapter class to exchange data between a data source and a data set;

a data column mapping class to map column names from a data source to column names in a data table;

a data table mapping class to map data returned from a query of a data source and a data table; and

a row update class to indicate when an update to a row in a data table is completed.

24. A method as recited in claim 22, wherein the object-oriented namespace includes:

a command builder class to generate SQL statements for data table updates; and

a connection class to enable a connection to a data source.

25. A method as recited in claim 22, wherein the SQL client namespace includes:

a command builder class to generate SQL statements for data table updates;

a connection class to represent a unique session to an SQL server data source; and

a data adapter class to exchange data between a data set and an SQL server for retrieving and saving data.

26. A computer system including one or more microprocessors and one or more software programs, the one or more software programs utilizing an application program interface to request services from an operating system, the application program interface including separate commands to request services consisting of the following groups of services:

a first group of services related to sharing data among a plurality of data providers;

a second group of services related to utilizing data stored in an object-oriented database;

a third group of services related to data used by a database client; and

a fourth group of services related to data types used by a database server.

27. A method comprising:

managing network and computing resources for a distributed computing system; and

exposing a set of functions that enable developers to access the network and computing resources of the distributed computing system, the set of functions comprising first functions to facilitate data sharing, second functions to facilitate accessing object-oriented databases, third functions to facilitate SQL client operations, and fourth functions to facilitate SQL server operations.

28. A method comprising:

calling one or more first functions to facilitate sharing of data among multiple data providers;

calling one or more second functions to facilitate accessing object-oriented databases;

calling one or more third functions to facilitate SQL client operations; and

calling one or more fourth functions to facilitate SQL server operations.

29. A method as recited in claim 28, wherein the first functions comprise functions for exchanging data between a data source and a data set, mapping column names from a data source to column names in a data table, and indicating when an update to a row is completed.

30. A method as recited in claim 28, wherein the second functions comprise functions for generating SQL statements for data table updates and enabling a connection to a data source.

31. A method as recited in claim 28, wherein the third features comprise functions for generating SQL statements for data table updates and representing a unique session to an SQL server data source.